



STATE OF MARYLAND

DHMH

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December 30, 2008

Public Health & Emergency Preparedness Bulletin: # 2008:52 **Reporting for the week ending 12/27/08 (MMWR Week #52)**

CURRENT HOMELAND SECURITY THREAT LEVELS

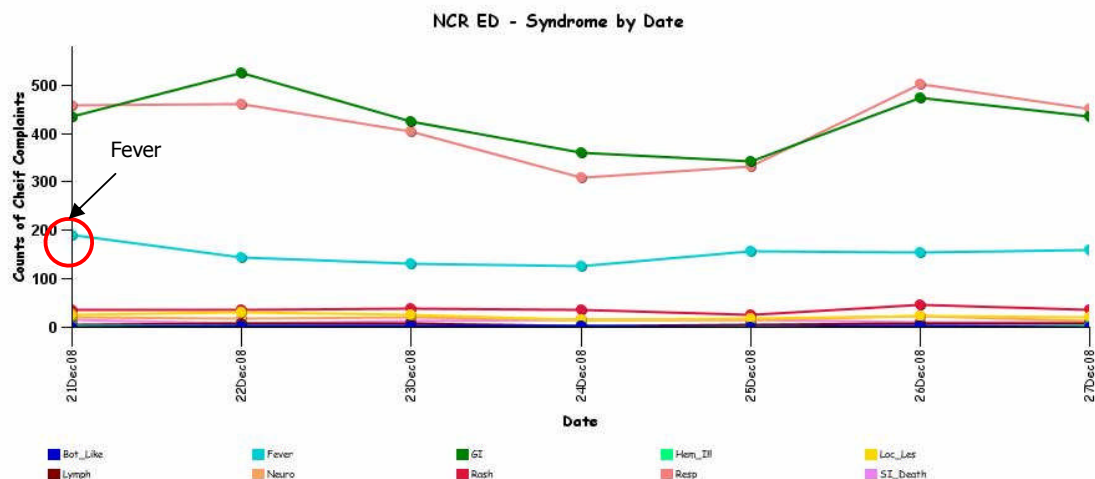
National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

SYNDROMIC SURVEILLANCE REPORTS

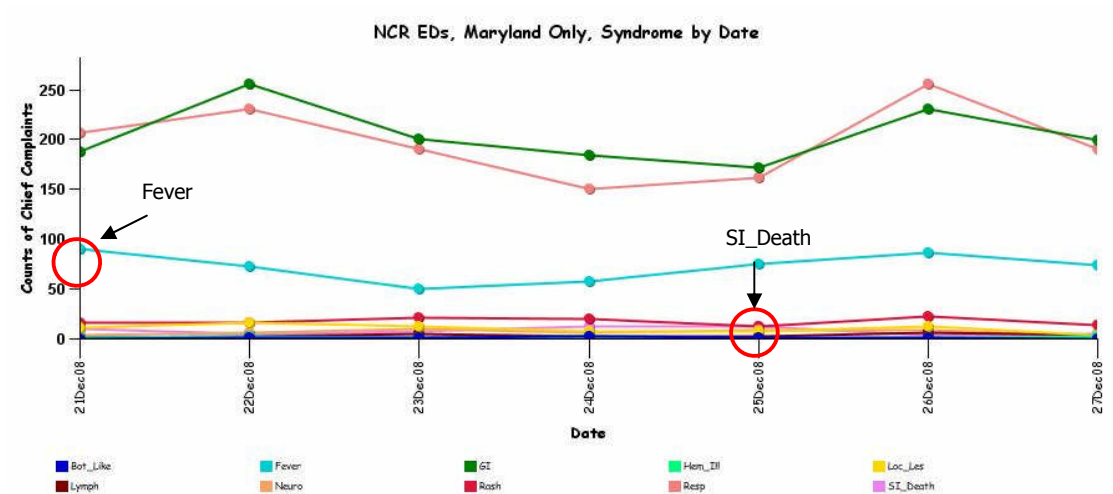
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

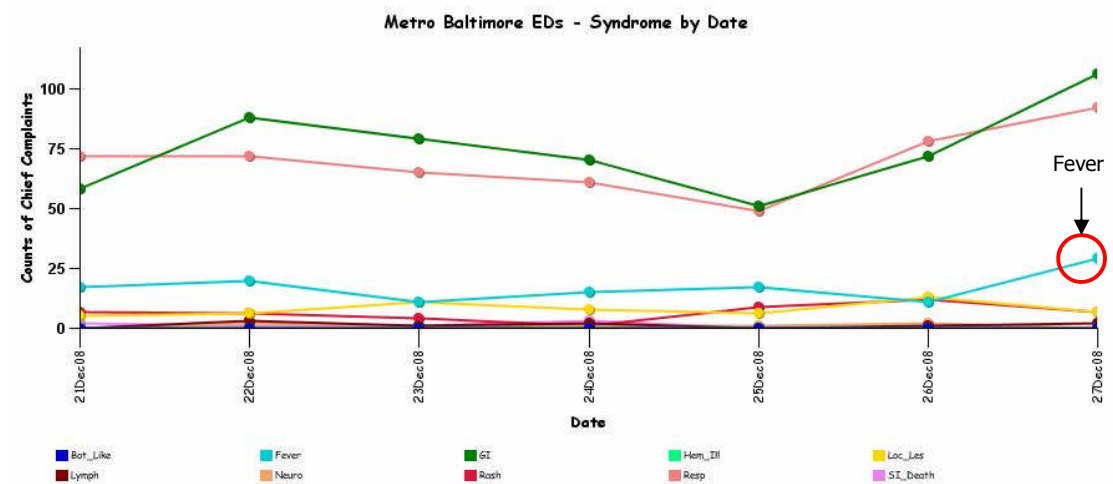
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system.



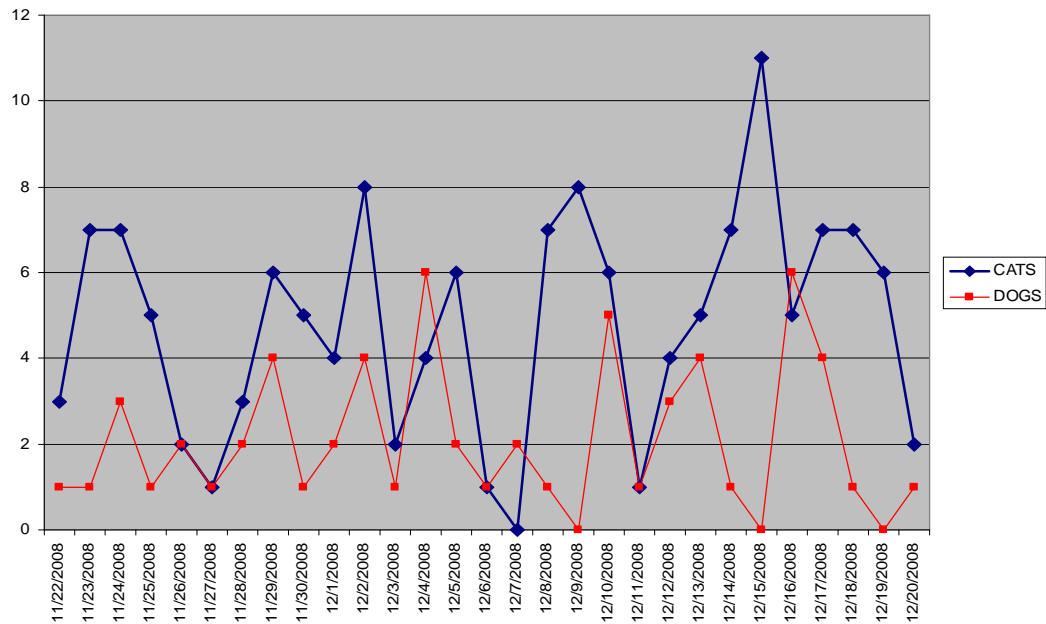
* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system.



* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

Dead Animal Pick-Up Calls to 311

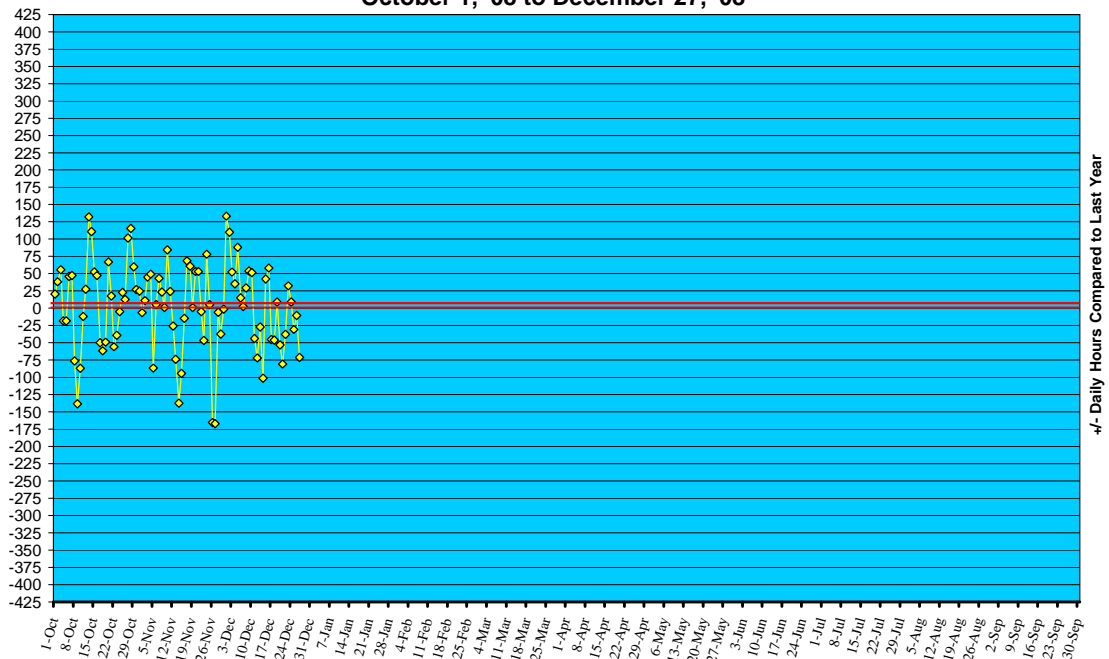


* This data is from week 51.

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/08.

**Statewide Yellow Alert Comparison
Daily Historical Deviations
October 1, '08 to December 27, '08**



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in November 2008 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (Dec 21 – 27, 2008):	06	0
Prior week (Dec 14 – 20, 2008):	08	0
Week#52, 2007 (Dec 23 - 29, 2007):	09	0

13 outbreaks were reported to DHMH during MMWR Week 52 (Dec. 21- Dec. 27, 2008):

12 Gastroenteritis outbreaks

8 outbreaks of GASTROENTERITIS associated with Nursing Homes

1 outbreak of GASTROENTERITIS associated with an Assisted Living Facility

1 outbreak of GASTROENTERITIS associated with a Hospital

1 outbreak of GASTROENTERITIS associated with a Rehabilitation Center

1 outbreak of GASTROENTERITIS associated with a Daycare Center

1 Respiratory illness outbreak

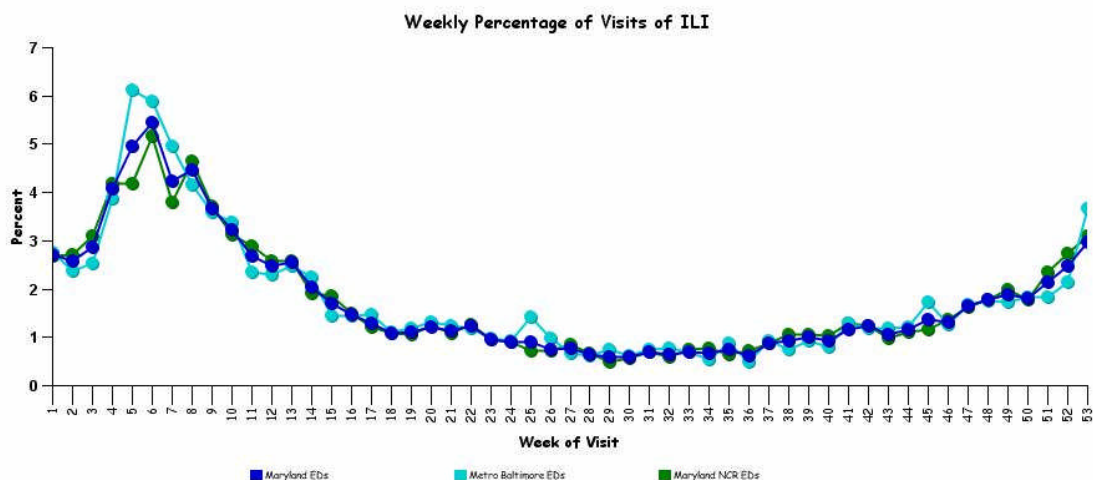
1 outbreak of PNEUMONIA associated with a Nursing Home

MARYLAND SEASONAL FLU STATUS:

Influenza activity in Maryland for Week 52 is LOCAL. During week 52, 19 confirmed cases of influenza were reported to DHMH.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: <http://bioterrorism.dhmm.state.md.us/flu.htm>

WHO update: As of December 12, 2008, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 390, of which 246 have been fatal. Thus, the case fatality rate for human H5N1 is about 63%.

AVIAN INFLUENZA (BELGIUM): 24 Dec 2008. Emergency measures have been taken after an outbreak of bird flu was detected in 2 farms in northern Belgium, Belgian media reported on Tuesday [23 Dec 2008]. Control tests showed last Friday [19 Dec 2008] that some ducks and geese in a farm in Bocholt, which borders the Netherlands, were infected with the H5 bird flu virus. The same virus was also detected in a farm in Buggenhout in the province of East Flanders. The H5 virus is not dangerous to human beings and is different from the H5N1 variant, which has killed more than 200 people since it surfaced in 2003 [see comment]. The Belgian Federal Food Agency, which supervises the safety of the food chain, has ordered emergency measures to be taken in the 2 farms and surrounding areas. Some 5000 animals had to be slaughtered as a precautionary measure and all poultry within a radius of one km of the farms must be kept indoors. Transport of poultry is forbidden for 21 days.

AVIAN INFLUENZA, SUSPECTED (DENMARK): 22 Dec 2008. A flock of free-range chickens on a farm in south-western Denmark is suspected of being infected with bird flu, the Danish Veterinary and Food Administration said on Monday [22 Dec 2008]. "The suspicion arose following unexpected results in blood tests done as part of routine checks for bird flu," the agency said in a statement. The agency added that it had isolated the flock pending further tests. Results would take a few days, it said.

AVIAN INFLUENZA, H5N3, H5N2 (TAIWAN): 22 Dec 2008. Taiwanese agricultural authorities on Sunday [21 Dec 2008] confirmed that they had slaughtered 18 000 chickens after an outbreak of bird flu. The authorities said when a farm in Luchu, southern Kaohsiung county, reported some of their chickens had died of an unknown disease on 21 Oct 2008, they immediately banned movement of the birds from the farm. An inspection report released Saturday [20 Dec 2008] showed that the chickens had contracted the H5N2 strain of the disease, a less virulent strain than H5N1, which can be transmitted to humans. However, the findings of the report came too late for the 18 000 chickens on the farm that were slaughtered on 14 Nov 2008. "We took the most stringent measures in dealing with the episode as according to the rules of the World Organisation for Animal Health (OIE), there was no need to slaughter those chickens," Mr. Huang Kwo-ching, deputy director of the Bureau of Animal and Plant Health Inspection and Quarantine, told AFP. "The OIE was informed of the outbreak yesterday," he said, adding that the origin of the outbreak remains unclear. Since the outbreak 76 chicken farms within 3 km [1.86 miles] of the epicentre have been monitored to ensure the disease does not spread, he added. Taiwan has suspended its poultry exports, but will be allowed to resume them if no fresh outbreak of H5N2 is reported within the next 3 months, Huang said. There have been no recorded cases of the deadly H5N1 strain in Taiwan, although in 2005 authorities here said 8 pet birds smuggled from China had tested positive for the strain and had been destroyed. The virus has killed about 250 people worldwide since late 2003.

AVIAN INFLUENZA, HUMAN (CAMBODIA): 21 Dec 2008. A 19-year old Cambodian man has survived the H5N1 bird flu virus which has killed 7 other people [between 2005 and 2007] in the poor Southeast Asian nation since 2005, a health ministry official said on Sunday [21 Dec 2008]. The youth, who became infected after eating dead poultry, was discharged from a Phnom Penh hospital on Saturday [20 Dec 2008] after being treated for 10 days, Ly Sovann, deputy director of communicable disease control department, said. "He left safe and sound," Ly Sovann told Reuters. Cambodia began culling poultry near its capital last week, and ordered a 3-month ban on poultry being moved from the province of Kandal, 50 kilometres [31 miles] south of Phnom Penh, after tests confirmed it had been hit by the deadly virus. The young man, the 8th person in Cambodia to have contracted bird flu since its 1st case in 2005, fell ill on 28 Nov 2008 but was only confirmed as having bird flu on 11 Dec 2008. All 7 of Cambodia's previous human cases have died. Since H5N1 resurfaced in Asia in 2003 it has killed more than 200 people in a dozen countries according to WHO.

NATIONAL DISEASE REPORTS:

No New disease outbreaks were reported to CDC Critical Biological Agents for MWWR week 52.

INTERNATIONAL DISEASE REPORTS:

EBOLA HEMORRHAGIC FEVER (DEMOCRATIC REPUBLIC OF CONGO): 27 Dec 2008. The Ministry of Health (MoH) of the Democratic Republic of the Congo [Congo DR] declared on 25 Dec 2008 an outbreak of Ebola hemorrhagic fever in Mweka District, Kasai Occidental province based on laboratory results from the Centre International de Recherches Medicales de Franceville (CIRMF) in Gabon. CIRMF confirmed the presence of Ebola virus in 2 samples from 2 of the patients in the outbreak by antigen detection. In addition, laboratory tests conducted by the Institut National de Recherches Biologiques (INRB) in Kinshasa, also confirmed the presence of _Shigella_. As of Fri 26 Dec 2008, WHO is aware of 34 suspected cases including 9 deaths (CFR [case fatality rate] 26 percent) associated with the ongoing event. Additional samples have been collected and are en route to INRB. The WHO Country Office, Regional Office, and Headquarters are supporting the MoH in Kinshasa and in the field at the location of the outbreak. In addition, the WHO Country Office is supporting the operational costs of the investigation and response teams and has deployed 4 vehicles to the field. Additional staff, outbreak response equipment, and supplies, including personal protective equipment (PPE), are also being sent to the area. An enhanced team of national and international experts is being mobilized to implement control strategies for Ebola hemorrhagic fever and to support outbreak field response in the province. WHO is working together with laboratory partners to provide comprehensive laboratory services, and to support the MoH in the control and investigation of the outbreak. WHO is unaware of any reports signaling the international spread of disease and advises against the application of any travel or trade restrictions upon the Democratic Republic of the Congo. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

EBOLA-RESTON, PORCINE (PHILIPPINES): 26 Dec 2008. Following the detection of the Ebola-Reston virus in pigs in the Philippines, the UN Food and Agriculture Organization (FAO), the World Organisation for Animal Health (OIE) and the World Health Organization (WHO) announced today [23 Dec 2008] that the government of the Philippines has requested the 3 agencies send an expert mission to work with human and animal health experts in the Philippines to further investigate the situation. An increase in pig mortality on swine farms in the provinces of Nueva Ecija and Bulacan in 2007 and 2008 prompted the Government of the Philippines to initiate laboratory investigations. Samples taken from ill pigs in May, June and September 2008 were sent to international reference laboratories which confirmed in late October that the pigs were infected with a highly virulent strain of Porcine reproductive and respiratory syndrome (PRRS) as well as the Ebola-Reston virus. Although co-infection in pigs is not unusual, this is the 1st time globally that an Ebola-Reston virus has been isolated in swine. Reston species can infect humans but no serious illness or death in humans have been reported to date. Since being informed of this event in late November [2008], FAO, OIE and WHO have been making every effort to gain a better understanding of the situation and are working closely with the Philippines Government and local animal and human health experts. The Department of Health of the Philippines has reported that initial laboratory tests on animal handlers and slaughterhouse workers who were thought to have come into contact with infected pigs were negative for Ebola Reston infection, and that additional testing is ongoing. The Bureau of Animal Industry (BAI) of the Philippines Department of Agriculture has notified the OIE that all infected animals were destroyed and buried or burned, the infected premises and establishments have been disinfected and the affected areas are under strict quarantine and movement control. Vaccination of swine against PRRS is ongoing in the Province of Bulacan. PRRS is not transmissible to humans. The planned joint FAO/OIE/WHO team will work with country counterparts to address, through field and laboratory investigation, important questions as to the source of the virus, its transmission, its virulence and its natural habitat, in order to provide appropriate guidance for animal and human health protection. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA (INDONESIA): 26 Dec 2008. Of the 43 cases diagnosed last week [week of 14 Dec 2008], 39 caught the virus locally, while the other 4 imported cases were from Malaysia. Last Friday [19 Dec 2008], the Ministry of Health made chikungunya a notifiable disease. Although doctors have already been informing the ministry of all cases since the end of 2006, when Singapore saw its 1st imported chikungunya case, the change means that doctors could be penalised with fines or jail terms for not doing so. A ministry spokesman said this will enable the ministry to monitor the disease more closely. A circular has gone out to all doctors informing them of the change. The appearance of locally transmitted chikungunya infections in Singapore this year also worries infectious diseases experts. Although no one has died of the infection, chikungunya, unlike dengue, can be very debilitating. There is also the risk that it could become endemic, which means the disease would be here to stay, with no chance of wiping it out. The Health Ministry said the disease has not become endemic yet, as a large number of cases is still from overseas. Until this year [2008], the few cases were all imported. But by the middle of this month [December], 388 people had caught the virus locally. A further 158 people who were infected were bitten by mosquitoes while overseas, primarily in Malaysia. The areas where people here are getting bitten by the _Aedes_ mosquito have also spread from the northern part of the island to places such as Bedok Reservoir and Tampines in the east. Cases have also been on the increase, rising sharply since the end of July [2008]. Given the current rates of infection, Singapore is likely to end the year with more than 600 chikungunya cases. A spokesperson for the National Environment Agency (NEA) said the _Aedes albopictus_ mosquito, which is the main carrier of this virus, lives in forests and other heavily vegetated areas. This makes it "a challenge to remove as many breeding habitats as possible in such areas," she said. She added that the current rainy season is unlikely to be the cause of the increased rates. Instead, it has more to do with "the movement of infected cases and the susceptibility of the population". The NEA spokesperson said it is fighting chikungunya the same way it does dengue -- by finding and destroying mosquito breeding spots and educating the public about stagnant water. The best way to stop the spread of the disease is to prevent mosquitoes from breeding. This year, the National Environment Agency spent close to 200 000 [USD 138 000] a day and has a team of 500 people doing just that. A mosquito needs just a small spoonful of stagnant water to breed. The _A.

aegypti_ breeds well in indoor receptacles but the _A. albopictus_ prefers forests and places with high vegetation. Those infected should wear long sleeves and long dresses or pants and use insect repellent to prevent getting bitten again by mosquitoes, which could continue the chain of transmission. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, SEROTYPE TYPHIMURIUM PHAGE TYPE 42 (NEW ZEALAND): 23 Dec 2008. Investigations into the outbreak of _Salmonella [enterica_ subtype] Typhimurium phage type 42 have found a detection of the bacteria in samples of flour taken from the home of one of the affected people. A further sample, from a 2nd case's home, has been provisionally confirmed as positive also. "The joint investigation undertaken by the Ministry of Health and NZFSA into the current outbreak of salmonellosis due to a particular strain suggests a food source," says Dr Greg Simmons, Chief Advisor for the Ministry's Population Health Directorate. "The evidence is not yet conclusive, but the results of the investigation to date indicate that people with the infection (especially children) were more likely to have eaten uncooked flour, for example in home-made play dough, raw cake and batter mixes. As food is the probable source of illness, the NZFSA will take the lead in any subsequent investigation." The following brands of flour could be affected: Champion, Edmonds, Homelife and Pam's brand plain flours with best before dates between June and July 2009. NZFSA has informed the manufacturer of the finding. The manufacturer has fully cooperated and acted responsibly and has implemented a voluntary trade withdrawal. The source of the bacteria is not known, and investigations are continuing, says Geoff Allen, NZFSA Director (Compliance and Investigation). "It is possible for low levels of bacteria to be on wheat or other points of the flour milling process, and studies indicate that about one percent of flour on average contains _Salmonella_," he added. "Flour is a raw ingredient and intended to be consumed cooked. Although flour is not expected to be a sterile product, we support the company's precautionary decision to withdraw the product. The affected batches of these brands can be safely used to cook if proper care is taken. If people have used these brands in their baking, for biscuits, cakes, breads or other Christmas treats, they can be reassured that the cooking will have killed the bacteria and that these home baked foods are safe to eat." (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

PLAGUE - FATAL (UGANDA): 23 Dec 2008. The death toll from bubonic plague in Uganda continues to rise as the government struggles to come up with a clear response even though early signs of the disease were detected at the beginning of 2008. At least 68 people have died since February 2008 when the plague was 1st reported, and now health experts warn that it could spread rapidly in the absence of an adequate response from health workers and local communities. About 32 000 people are at risk of acquiring the disease if they do not take precautions. The outbreak was initially restricted to one district but has now spread to 2 others, where 73 cases have been reported. Arua District Health Officer Dr Patrick Anguzu said the area has been registering a few cases every year, but this year the numbers started rising, reaching alarming levels in August 2008. Dr William Mbabazi of the World Health Organization said the rising rates are due to poor hygiene and sanitation because people do not clean their houses, allowing bacteria-infected wild rats to find a conducive environment in dirty homes, spreading the infected fleas. Domestic rats then picking the fleas and due to their contact with humans, the fleas pass on the disease. The plague, which mainly affects women and children, has spread into the districts of Arua and Nebbi, where residents still live in mud huts. The WHO says the casualties in these districts are victims of a cultural belief that women and children must sleep on the floor while the men sleep on beds. (Plague is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://bioterrorism.dhmm.state.md.us/>

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

CDC has issued interim guidelines for the use of Oseltamivir (Tamiflu) in influenza cases. The guidelines can be found at <http://www.cdc.gov/flu/professionals/antivirals/index.htm>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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